

# Driving Down VMT

## Curbing Climate Change with Smart Growth & Transportation Top State-Level Policies

### I. LAND USE PLANNING AND REGULATION POLICIES

#### **Policy: Support climate-friendly compact growth and integrated transportation/land use planning.**

In many areas, education, blueprint, and visioning exercises and resulting citizen support have yielded better regional growth strategies, involving both more compact development and integration of multimodal transportation strategies.

#### Models:

- *Envision Utah*: Over the course of 5 years, this effort engaged citizens in the Greater Wasatch area of the state and resulted in agreement on a ‘Quality Growth Strategy’ scenario that called for more walkable communities, a region-wide transit system, and transit-oriented development.<sup>1</sup>
- *The Land Use Transportation Air Quality Project (LUTRAQ)*: This was an alternatives analysis that grew out of the response to the planned construction of the Western Bypass highway outside of Portland, Oregon. Led by 1000 Friends of Oregon, it began in 1988 and generated eleven technical documents detailing an alternative investment and policy strategy that included a mixture of innovative land use and transportation measures to protect open spaces, forests, farmland, and air quality while meeting market demands for suburban styles of development. By 1997, the highway project was taken off the books, thanks also to successful implementation of light rail, downtown redevelopment, and land protection in the region.
- *SACOG Blueprint Process*: The study is an award-winning application of GIS and web-based modeling techniques that provides data on the effects of current and future land use decisions. Participants in community workshops are able to examine the impact of growth scenarios on indicators such as traffic congestion, air pollution, employment, housing availability and open space in order to help design a community vision. This process generated a preferred growth strategy that will guide development in the Sacramento region and ultimately be integrated into the region's LRTP. The Sacramento region's Master Transportation Plan (MTP) update will build from the Blueprint visioning process, and will be coordinated with the update of the SIP as well as the next Regional Housing Plan, making it possible for the first time to truly integrate planning for land use and housing, air quality and transportation.
- *New Jersey Cross-Acceptance Process*: This is a formal, periodic comparison of local and county land use and infrastructure plans with a statewide policy plan called the “State Development and Redevelopment Plan.” It is the primary means by which the state comprehensive plan is coordinated with the policies of local, county, regional, and state plans to ensure compatibility.

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<sup>1</sup> CCAP Guidebook, “Part One: Land Use, Transit & Travel Demand Management,” p. 17.

Impact on CO2:

Time Frame: Medium-term

**Policy: Direct state spending to communities that adopt land use planning and regulation best practices that meet climate and Vehicles-Miles Traveled (VMT) performance standards.**

State governments should inventory all available discretionary funds in such areas as housing, economic development, infrastructure, schools transportation, and state facilities, and allocate these funds to communities that adopt best practices in land use planning and regulation that meet performance standards related to climate and VMT reduction goals. The new LEED for Neighborhood Development rating system provides a statement of such best practices.

Models:

- *Massachusetts Commonwealth Capital Fund*: The state uses a scorecard system that awards funding for communities that align their development rules and funding streams to encourage compact, mixed-use communities.<sup>2</sup>
- *California Infrastructure and Economic Development Bank's Infrastructure State Revolving Fund*: A scorecard system that rates applications on a 200-point scale, giving preference to projects that meet certain criteria.<sup>3</sup>

Impact on CO2: High

Time Frame: Short-term

**Policy: Require local comprehensive plans and environmental impact statements to include global warming emissions analysis and reduction policies.**

Models:

- *King County, WA*: The county's recently passed Climate Plan sets a goal of working with local and state governments to account for greenhouse gas emissions in evaluations of development and transportation infrastructure investments.<sup>4</sup>
- *New Mexico*: The state recently became the first in the country to require state-funded local comprehensive plans to include global warming emissions analysis and reduction strategies. The state has provided policy, implementation, and monitoring assistance, as well as funding opportunities for localities embarking on this effort.
- *Massachusetts*: The state recently adopted a policy requiring estimation of greenhouse gas emissions in environmental impact reports for development projects under the state's "little NEPA" statute.

Impact on CO2:

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<sup>2</sup> Center for Clean Air Policy Transportation Emissions Guidebook, "Part One: Land Use, Transit & Travel Demand Management," pp. 61-62.

<sup>3</sup> [http://www.ibank.ca.gov/state/ibank/ibank\\_homepage.jsp](http://www.ibank.ca.gov/state/ibank/ibank_homepage.jsp)

<sup>4</sup> King County Climate Plan: <http://www.kingcounty.gov/exec/globalwarming/landuse.asp>, p.78

Time Frame: Medium-Term

**Policy: Require, or provide financial incentives for, zoning for smart growth.** Despite the market demand for smart growth, one of the biggest hurdles to climate-friendly development patterns is the myriad of outdated local land use policies that prohibit mixed use, more compact development. Through this policy, the state would mandate, or create financial incentives for, local zoning that provides for smart growth as of right .

Models:

- *Wisconsin*: The state's 1999 smart growth legislation required communities of more than 12,500 people to adopt a Traditional Neighborhood Development ordinance.<sup>5</sup>
- *Massachusetts*: Under Chapter 40R, local governments receive additional local aid after adopting overlay smart growth zoning. The state provides additional financial bonuses upon the issuance of building permits and pays any additional cost borne by the local school district as a result of housing development in the 40R districts.

Impact on CO2:

Time Frame: Long-term

**Policy: Protect open-space to absorb CO<sub>2</sub> and concentrate development in existing areas.**

Models:

- *New Jersey's Garden State Preservation Act*: In 1999 it created a funding mechanism to preserve farmland and open space, through a dedicated sales tax and matching county and municipal funds. The state's goal is to preserve 1 million acres of open space by 2009.<sup>6</sup>
- *Ontario, Canada*: The province's Greenbelt Protection Plan protects 1.8 million acres of land and is a key component in the province's growth strategy to direct development into its urban centers.<sup>7</sup>
- *Oregon's Land Conservation and Development Act of 1973*: This law requires an urban growth boundary around each city in the state, as well as around the Portland metropolitan region. It was recently reaffirmed by the November 6, 2007 approval of Measure 49, which allows limited development (three to ten homes, in most cases) in rural parcels, but preserves the state's overall land protections. Other examples include Washington's Growth Management Act, which requires that certain counties designate urban growth areas, and similar measures in Denver, San Francisco, Baltimore, and Minneapolis-St. Paul, Wisconsin, and Chicago (some are urban service boundaries).

Impact on CO2:

Time Frame: Long-term

## II. DEVELOPMENT AND HOUSING POLICIES

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<sup>5</sup> <http://www.doa.state.wi.us/dir/documents/compplanstats.pdf>

<sup>6</sup> <http://www.state.nj.us/dep/greenacres/preservation.htm>

<sup>7</sup> <http://www.mah.gov.on.ca/Page187.aspx>

**Policy: Strengthen cities, towns, and villages by creating and expanding tax incentives for redevelopment and infill development.**

The equivalent of a ‘fix it first’ policy for development, the state could create a series of tax credits or other incentives, including streamlining requirements, to encourage development in existing areas and the rehabilitation of existing buildings. Too often, it’s easier and cheaper for developers to build in greenfields, which creates sprawl and facilitates more driving. In recent years, 26 states have passed historic preservation tax credits; this incentive could not only be expanded by making the terms more generous, but a similar incentive could be extended to non-historic properties in priority downtowns, near transit, and in growth centers.

Models:

- *Rhode Island Historic Preservation Tax Credit*: Successfully used to encourage the rehabilitation of historic properties, this program could be used as a model for an infill and rehabilitation tax credit program.<sup>8</sup>
- *Maryland Models & Guidelines for Infill and Smart Neighborhood Development*: Encourages the adoption and implementation of infill programs by offering incentives to local governments.<sup>9</sup>

Impact on CO2:

Time Frame: Short-term

**Policy: Create smart location requirements and incentives for developers, businesses and homeowners.**

Direct all state financial support for housing and other private development to projects in locations where VMT generation will be minimized. Provide incentives, such as discounted mortgages or tax deductions for homeowners or businesses that choose to locate in mixed-use, energy-efficient communities served by transit.

Models:

- *Qualified Allocation Plans (QAPs)* for low-income housing tax credit allocation in Georgia, Massachusetts, and other states
- *Location Efficient Mortgage*: Programs in Seattle, San Francisco, Los Angeles, Portland and Chicago<sup>10</sup> [Note: consider deleting for lack of effectiveness]
- *Illinois Business Location Efficiency Incentive Act*: Provides a small additional corporate income tax credit for companies that are accessible by public transportation and/or proximate to affordable workforce housing.<sup>11</sup>

Impact on CO2: Medium

- 39% VMT reduction per household

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<sup>8</sup> <http://www.rihphc.state.ri.us/credits/commstate.php>

<sup>9</sup> [http://www.mdp.state.md.us/order\\_publications.htm](http://www.mdp.state.md.us/order_publications.htm)

<sup>10</sup> Ibid, p. 80.

<sup>11</sup> <http://ilga.gov/legislation/publicacts/fulltext.asp?Name=094-0966>

Time Frame: Medium-term

**Policy: Create a Transit Villages program to boost development around transit centers.**

Through this program, the state would help identify and coordinate opportunities for transit-oriented development, in conjunction with local development plans. This could involve using state transportation funds to prioritize housing and employment opportunities adjacent to transit, by providing grants for station areas to local governments.

Models:

- *New Jersey's Transit Village Initiative:* Through this program, the NJ Department of Transportation, NJ Transit, and nine other state agencies partner to provide priority funding, technical assistance, and grants to communities that are designated as 'transit villages.'<sup>12</sup>

Impact on CO2: Medium

Time Frame: Long-term

**Policy: Designate priority downtowns and growth centers.**

The state could create a designation for mixed use commercial centers that are willing to meet high environmental and economic benchmarks set by the state, similar to the idea of the LEED-ND certification for communities. These areas could be eligible for certain types of funding that could be used for building rehabilitation, mixed use development, transportation improvements, and other strategies that reduce global warming emissions.

Models:

- *Vermont's Downtown Program:* Established in 1994, this program allows qualifying downtowns to be eligible for state tax credits, loans, and grants, as well as technical assistance, to bolster development and revitalization.<sup>13</sup>

Impact on CO2:

Time Frame: Medium-term

### III. TRANSPORTATION AND PARKING POLICIES

**Policy: Adopt a state transportation funding policy that supports climate goals.**

A state should adopt criteria for transportation project funding that ensure projects will support growth in transit- and pedestrian-friendly locations and improve walking, bicycling and transit conditions, rather than prioritizing improvements in driving conditions. This could include setting VMT/climate targets, evaluating funding through a mode-neutral lens, adopting a 'Fix it First' infrastructure policy, eliminating state restrictions on using gas tax revenues for transit, and a variety of other approaches.

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<sup>12</sup> <http://www.state.nj.us/transportation/community/village/>

<sup>13</sup> <http://www.historicvermont.org/programs/downtown.html>

Models:

- *New Jersey*: Much of the state's transportation policy is centered on a 'Fix it First' bill (SB 16) that passed in 2000 and on transit. In addition, New Jersey's Regional Capital Investment Strategy, which is part of the state's Regional Transportation Plan, sets investment principles and guidelines for transportation spending and policy.<sup>14</sup>

Impact on CO2: High

Time Frame: Medium-Long term

**Policy: Set state targets for Vehicle-Miles Traveled.**

The state could set long-term targets for slowing and then reducing VMT growth, which would then be allocated to local and regional governments. The local governments would submit VMT reduction plans to the state. Financial and/or technical assistance could be provided to localities to help achieve these reductions.

Models:

- *Clean Air Act*: Currently, metropolitan regions must inventory their emissions sources and develop plans to bring air pollutants in line with Clean Air Act standards. A VMT system could work similarly.<sup>15</sup>

Impact on CO2: High

Time Frame: Medium-term

**Policy: Substitute road diet, traffic calming, and complete streets objectives for motor vehicle level of service objectives in transportation planning.** Free-flowing traffic is no longer a sensible objective for state transportation agencies. Meanwhile, proximity, walkability, diverse mobility options, and freedom from traffic impacts have become the de facto transportation planning objectives for US communities. State policy reform would update agency practices to eliminate vehicle level of service (LOS) as a main consideration in planning.

Also, policies should require counties and localities to adopt multimodal (pedestrian and bike) plans. Forty percent of all trips in the U.S. are less than two miles; much travel that could easily be accomplished by walking or bicycling.<sup>16</sup> Pedestrian and bicycle plans can help localities create the infrastructure needed to boost walking and bike-riding rates.

Models:

- *Decommissioning highways and lanes to create better-functioning communities*: San Francisco chose not to rebuild the Embarcadero expressway. Seattle has adopted a road

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<sup>14</sup><http://www.nga.org/portal/site/nga/menuitem.6c9a8a9ebc6ae07eee28aca9501010a0/?vgnextoid=2effe31b60a04010VgnVCM1000001a01010aRCRD&vgnnextchannel=759b8f2005361010VgnVCM1000001a01010aRCRD> and <http://www.nitpa.org/Plan/Need/CIS/default.aspx>

<sup>15</sup> <http://www.epa.gov/air/caa/>

<sup>16</sup> National Personal Transportation Survey: <http://npts.ornl.gov/npts/1995/Doc/index.shtml>

diet practice while many other cities and towns throughout the US have eliminated traffic lanes from arterial routes and other streets.

- “*Complete Streets*” and *traffic calming policies and programs* have been adopted by many states and cities across the nation by legislation or agency action.
- *Portland’s Comprehensive Pedestrian Plan*: Detailed design and policy guidance.<sup>17</sup>

Impact on CO2:

- Area-level VMT reductions of 1-5% from bike plans
- 10% per household decrease in VMT in pedestrian-friendly areas.

Time Frame: Near- and short-term

**Policy: Invest in new transit and significantly expand and improve existing systems.**

Increased public transportation usage directly displaces automobile usage, reducing VMT on much more than a 1:1 basis for each new mile of transit usage. In addition to expanding systems, studies have shown that funding transit improvements, including increasing the frequency and hours of service and improving transit facilities, also increases ridership and reduce driving.

Models:

- *Light Rail*: Denver FasTracks Plan: A \$6.2 billion plan to implement 119 miles of light rail and diesel commuter lines between 2013 and 2016. By 2025, 22 percent of peak hour trips in FasTracks corridors are projected to occur via transit.<sup>18</sup>
- *Service Improvements*: New York City: Public transit passenger levels increased by 31% between 1995 and 2000 due in part to fare discounts (weekly and monthly passes) and free bus-subway transfers.<sup>19</sup>

Impact on CO2: High

- 1% increase in transit frequency saves .5% in VMT.
- Light rail can yield a corridor-level VMT reduction of 1-2%.
- Bus Rapid Transit can also yield a corridor-level VMT reduction of 1-2%.

Time Frame: Medium-term

**Policy: Implement road-pricing strategies and direct the revenue to transit, ‘fix-it-first’ infrastructure maintenance, and other VMT-reducing strategies.**

Through this market-based system, a menu of tolls, congestion charges, and high occupancy toll (HOT) lanes reduce driving and congestion, while providing additional revenue.

Models:

- *London, UK*: Drivers pay a “congestion charge” to drive in the city center during high-peak times in order to reduce traffic congestion during weekdays.<sup>20</sup>

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<sup>17</sup> CCAP Guidebook, “Part One: Land Use, Transit & Travel Demand Management,” pp. 23-25.

<sup>18</sup> [http://www.rtd-fastracks.com/main\\_1](http://www.rtd-fastracks.com/main_1)

<sup>19</sup> “Renaissance of Public Transport in the United States?” *Transportation Quarterly*, Vol. 56, No. 1, Winter 2002 (33-49).

<sup>20</sup> <http://www.cclondon.com/>

- *New York - New Jersey*: The New York and New Jersey Port Authority implemented a variable pricing system for peak and off peak travel, using the revenue to fund transportation improvements.<sup>21</sup>

Impact on CO2: High

- 1-3% area-level VMT reduction

Time Frame: Short-term

**Policy: Authorize insurance companies to offer Pay-As-You-Drive insurance.**

Insurance companies assess participants based on their number of vehicle miles traveled, in combination with traditional risk-based rates, which allows motorists to reduce costs and encourages people to drive less.

Models:

- *Texas*: Progressive Auto Insurance tested a PAYD option after authorizing state legislation was passed in 2001.<sup>22</sup>
- *The Netherlands*: One of the country's biggest insurance companies runs a PAYD system that charges participants 90 percent of their current premium, then provides a rebate or an additional bill based on how much they drive each policy term. Mileage data is collected during annual vehicle inspections.<sup>23</sup>

Impact on CO2: Medium

- Up to 10% VMT reduction for those with PAYD insurance

Time Frame: Short-term

**Policy: Encourage changes to municipal parking policies that reduce demand and driving rates.** Parking pricing and supply strategies can dramatically decrease auto use, especially in areas with transit accessibility. These strategies include increasing parking rates, decreasing parking availability, deregulating development through the elimination of minimum parking requirements in zoning laws, taxing parking providers, or lowering parking demand through methods like employer parking cash-out.

Models:

- *Portland*: The city replaced minimum parking requirements with maximum standards that vary with the site's accessibility to transit.<sup>24</sup>
- *Minneapolis*: Employers in the downtown implemented parking cash-out programs, which give employees the option of receiving cash or transit fare instead of their parking benefit. These programs increased bus ridership in the area by 47%.<sup>25</sup>

Impact on CO2: Medium

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<sup>21</sup> [http://ops.fhwa.dot.gov/tolling\\_pricing/value\\_pricing/projtypes/pricingtollfacil.htm](http://ops.fhwa.dot.gov/tolling_pricing/value_pricing/projtypes/pricingtollfacil.htm)

<sup>22</sup> CCAP Guidebook, "Part One: Land Use, Transit & Travel Demand Management," p. 77.

<sup>23</sup> CCAP Guidebook, "Part One: Land Use, Transit & Travel Demand Management," p. 76.

<sup>24</sup> CCAP Guidebook, "Part One: Land Use, Transit & Travel Demand Management," p. 100.

<sup>25</sup> Ibid.

- 15-30% site-level decrease in VMT

Time Frame: Short to Medium-term

**Policy: Provide incentives for commuters to travel to work by transit, bike, or other auto-alternatives.** Employers opt into state-authorized commuter incentive programs, which provide employees with incentives to commute by carpooling and/or auto-alternatives.

Models:

- *Minnesota:* The state provides a 30% tax credit on state corporate franchise taxes when an employee transit benefit is provided, and net expenditure on transit can be declared a business expense.<sup>26</sup>
- *Maryland's Live Near Your Work Program:* Provides \$3,000 credit for people who purchase a home near their workplace.<sup>27</sup>

Impact on CO2: Low-Medium

- 19% VMT reduction per employer

Time Frame: Short-term

#### IV. GOVERNMENT STRUCTURE

**Policy: Create a cabinet-level body to coordinate state agency activities affecting development and greenhouse gas emissions.**

Utilizing smarter development and transportation options to reduce driving requires the cooperation of multiple agencies, perhaps more so than any other global warming solution strategy. The role of a high-level policy coordinating entity could include setting targets for VMT reduction, reviewing state-level policies and programs to identify areas of opportunity, reviewing local comprehensive plans for adherence to the state's climate goals, and creating a process for citizen involvement.

Models:

- *Maryland Office of Smart Growth.*<sup>28</sup>
- *Massachusetts Office for Commonwealth Development*

Impact on CO2:

Time Frame: Short-Term

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<sup>26</sup> [www.mplstmo.org/pdf/TransitBenefits.pdf](http://www.mplstmo.org/pdf/TransitBenefits.pdf)

<sup>27</sup> <http://www.dnr.state.md.us/education/growfromhere/lesson15/MDP/LNYW.htm>

<sup>28</sup> <http://www.mde.state.md.us/air/mccc/>